

# Update: Events & Issues

**Ed Sierra**

**ORPS/LL Coordinator  
Quality Management Office**

**ESH Coordinators Meeting  
September 12, 2007**



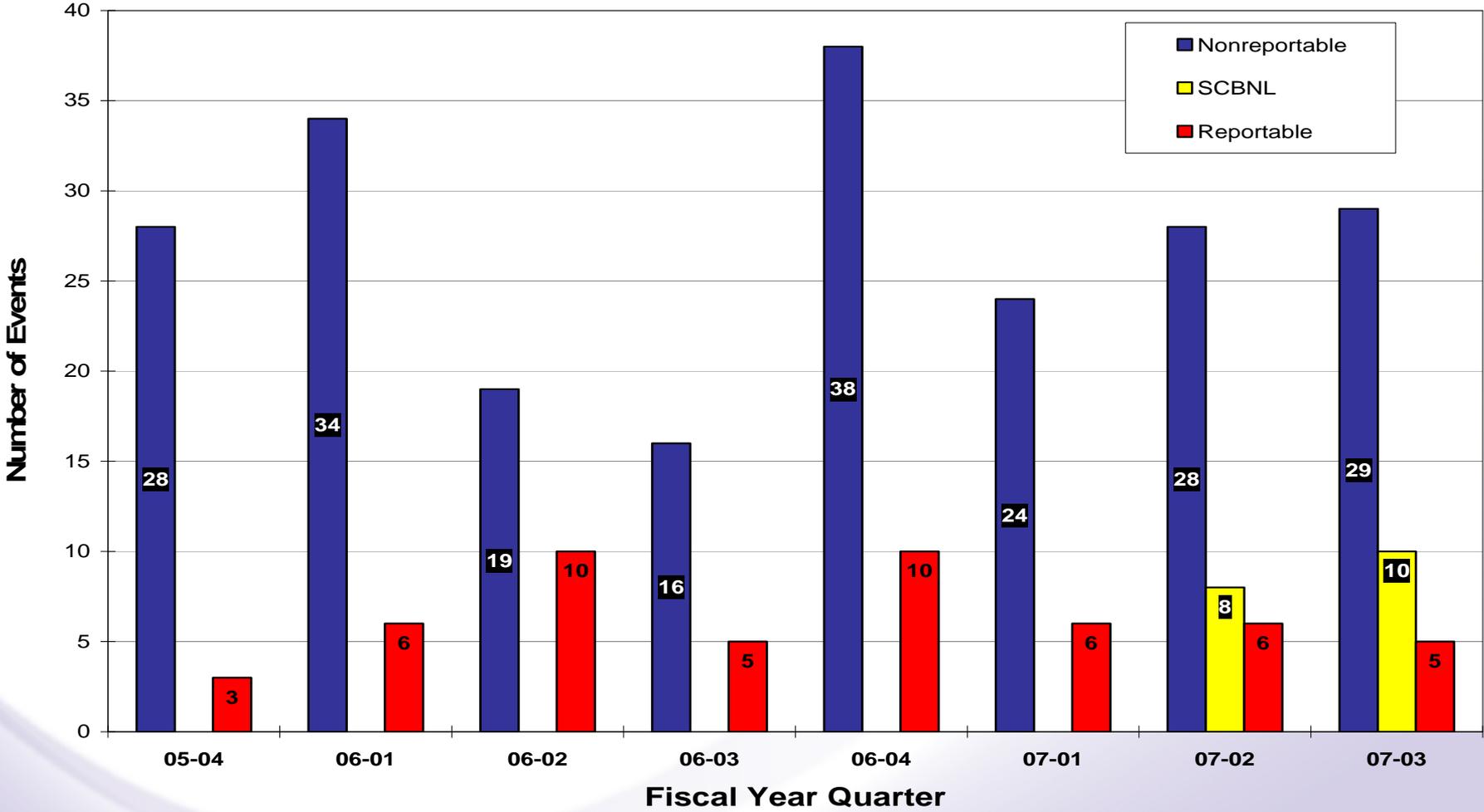
SIXTY YEARS  
OF DISCOVERY  
1947-2007

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**BROOKHAVEN**  
NATIONAL LABORATORY



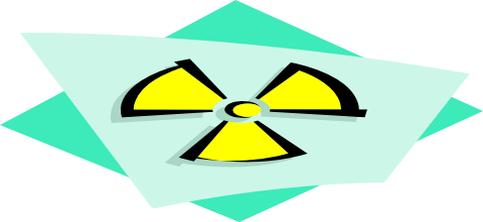
# Event Categorizer Electronic Entries



# Programmatic



- Personnel Contamination
- Medical Department
- NSLS
- Physics
- CA-D
- BGRR Project
- Plant Engineering
- Utilities Struck
- Material Transportation
- Electrical Shock Hazards
- Material Handling Issues
- Waste Management
- Chemistry
- Environmental Restoration
- Railroad Tracks
- New Construction
- Noise
- Site Fire Alarm System (new)
- Butt Fires (new)
- CFN (new)



- Personnel Contamination – 2006
  - 02/23 – Personnel Cont at Building 901
  - 03/22 – Cont Detected on Employee's Shoes at PET
  - 03/28 – Cont of two workers at B-801 during removal of BLIP target filter
  
- Personnel Contamination – 2007
  - 04/26 – F-18 finger contamination at PET



## ■ Medical department, 2006

- 03/07 – Rad Cont Outside a Controlled Area at B-490 (SC3)
- 03/10 – Survey Meter/Frisker Taken Outside Controlled Area @ B490
- 03/13 – PB, Shock from terminal in legacy installed light timer (SC4)
- 03/28 – Cont of two workers @ B801 during removal of BLIP target filter
- 05/19 – Cont found outside a posted area @ B490
- 07/31 – Trit cont on unposted benchtop in a posted RMA at B490
- 08/24 – Painter's spackling knife contacts aband live electrical wiring @ 490, (SC3)
- 11/16 – KK, Contamination at PET Facility, (SC3)
- 10/31 – BLIP cooling water leak detection system did not function during testing

## ■ Medical department, 2007

- 04/26 – F-18 finger contamination at PET
- 05/16 – Medical Student Passes Out after seeing blood at B-490
- 05/16 – Employee lacerates arm while cleaning a microtome at B-490
- 05/22 – First-degree chemical burn due to small hole in glove @ B-490
- 07/05 – Building 801 D Tank Leak, ~5mL
- 09/05 – Lab Coat Sleeve burned by contact with Bunsen burner flame, (SC3)

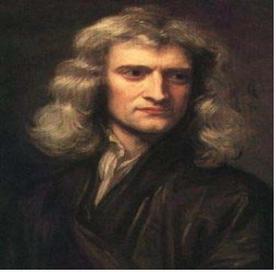


## ■ NSLS, 2006

- 02/21 – X17C Laser Procedure Violation (Door left open while laser in operation)
- 05/08 – Improper work sequence during lead shielding removal at beam line
- 06/09 – XSXD Power Supply Shut-off Failure
- 07/17 – Chemical Spill in Wet Chemistry Laboratory (SC3)
- 08/21 – AL/ES, Accidental cutting of energized power tool line cord (SC3)
- 11/16 – Spent Fluorescent Bulbs Found Outside Waste Storage Area

## ■ NSLS, 2007

- 05/03 – Minor fire in ventilation system
- 06/12 – Aluminum plate pinches beamline User finger tips
- 07/03 – Employee Sustains Injury to Ankle Tripping on Stairs



## ■ Physics, 2006

- 07/07 – Employee fractured metatarsal after tripping over rug/mat
- 08/09 – Stop Work Order issued due to antennae at edge of B510 roof

## ■ Physics, 2007

- 06/11 – Improper Status provided by Laser/Shutter Indicators at ATF, SC3



## ■ CA-D, 2006

- **03/06 – Discovery of Radiation Monitor in Interlock-Bypass-Mode (SC3)**
- 03/29 – Lack of admin approval (non-safety related) for NASA NSRL experiment
- **04/14 – 400 Amp Electrical Switch Failure (OE, SC2, SC4)**
- 05/04 – CA-D Chipmunks read high and alarms at a lower dose rate than intended
- 06/02 – < 6 oz of tritiated magnet water splashed onto the workers pant-leg @ RHIC
- 06/09 – 3 gals of heat transfer fluid (oil) spilled on Storage Yard pavement by B-924
- 07/20 – Pulling cable along floor results in back strain
- 08/14 – ~ 200 gal spill from 902 Cooling Towers to parking lot and grass
- 08/21 – Leg laceration while descending ladder at B1005
- **09/05 – Non-standard installation of electrical disconnect temp wiring (SC3)**
- 09/13 – Trip on stairs results in ~ 1 qt. spill of H<sub>2</sub>SO<sub>4</sub> from battery at B901A
- 10/12 – Worker hit in head/injured by shelf while moving a workbench
- 11/02 – Fire Protection Impairment Process Not Properly Followed @ B1004B
- 11/06 – Man lift damaged during tree cutting operations
- 11/08 – Loose 120 VAC wires on a terminal block results in sparking
- 11/27 – Minor finger laceration



## ■ CA-D, 2007

- 05/02 – Minor brush fire in Front of building 911
- 05/10 – Power Supplies for Booster to AGS trip
- 05/15 – Microwave fire in Building 1005, SC3
- 08/09 – Hand caught in freight elevator door at 911, SC4



- BGRR Project, 2006
  - 08/03 – Removal of fuel anchor (BGRR) not approved by work procedure
  - 09/26 – Cont (80, 000 dpm) found outside the BGRR RCA (SC3)
  
- BGRR Project, 2007
  - 07/20 – 5,000 dpm found on Workers Glove at BGRR



- Plant Engineering, 2006

- 01/27 – Burning Cotton Apron In PPE/Tool Bag Causes Evac @B197 (SC3)
- 05/10 – Vehicle window damaged during concrete sidewalk removal work (SC3)
- 06/16 – Asbestos discovered during demolition of B-422
- 10/13 – Silica Exposure During Concrete Crushing Machine Operation, (SC3)
- 12/05 – PE groundskeeper received a minor injury to the chin
- 12/13 – Pump leak results in 100 gal spill of propylene glycol @ B729

- Plant Engineering, 2007



- Material Handling Issues, 2006

- 01/17, Tennelec smear counter falls during transport, (SC3)
- 06/30, Computer server unit falls out of BNL box truck grazing workers leg (SC3)
- 07/20, Pulling cable along floor results in back strain
- 08/28, During transport a forklift dropped a secured aerial lift (SC3)

- Material Handling Issues, 2007



## ■ Waste Management, 2006

- 01/20 – USQ on rusting HEPA exhaust stack @ B860 (SC3)
- 02/22 – Lapse in USQ training qualification
- 08/04 – HFBR Dumpster alarms BNL Radiation Truck Monitor (SC3)
- 08/16 – Walk through of HFBR identifies rad/non-rad items that are not segregated

## ■ Waste Management, 2007

- 03/06 – PISA & USQ for Safety Analysis and potentially unanalyzed haz (SC2)



## ■ Chemistry, 2006

- 01/17 – Energ ckt disc in cut conduit in floor slab @ B555, (SC3)
- 02/23 – Personnel Cont at Building 901
- 03/22 – Cont Detected on Employee's Shoes at PET

## ■ Chemistry, 2007

- 08/02 – BNL employee trips on asphalt lip near B-555 and bruises knee



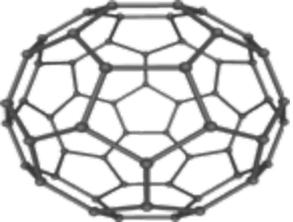
- Environmental Restoration Projects, 2006
  - 09/22 – HFBR air conditioning water pump seal leak (SC3)
  - 10/30 – Flaw in ERP calculation of total recordable injury statistics
  - 11/30 – SM, Failure to Maint Config Control of DOE-SER specified Documents (SC3)
  
- Environmental Restoration Projects, 2007
  - 05/01 – Contamination in HFBR fuel vault
  - 06/14 – Tool Bag at HFBR Measures above Rad Release Limits
  - 07/09 – Untrained Personnel Entry into Confined Space at HFBR
  - 07/17 – Inappropriate Change to Work Procedure at HFBR



- New Construction, 2006

- 04/21 – Sub incurs severe laceration of leg at CFN (SC3)
- 07/31 – A/C mechanic cuts arm at RSB Construction Site

- New Construction, 2007



■ CFN, 2007

- 05/04 – Discovery of smoldering mulch bed on south side of CFN
- 08/01 – Rain water intrusion into CFN



## ■ Site Fire Alarm System

- 06/14 – Site-wide Fire Alarm Communications Malfunction, SC4
- 07/05 – Site Fire Alarm System Loop 1 Bldgs not Reporting
- 08/17 – Loss of BNL Fire Alarm Loops to Firehouse



■ Butt Fires, 2007

- 05/02 – Minor brush fire in Front of building 911
- 05/04 – Discovery of smoldering mulch bed on south side of CFN
- 05/15 – Fire in Building 120 Butt Stop
- 05/24 – Brush fire at remote location in the SE corner of site
- NOTE: 06/15 – Issued Fact-finding/Causal Analysis/Preventive Actions No.: QMO-2007-0001, Inst. ATS 3788
- 06/28 – Butt Can Fire at Building 153

# **In Summary: Quarterly Performance Report**

- **New Area Requiring Attention**
  - **Waste Management Facility Documented Safety Analysis**
- **Areas Requiring Continued Attention**
  - **Safety Evaluation Report (SER) Issues**
  - **Railcar Operation**
- **Areas of Improving Performance**
  - **Material Handling**